

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of)	
)	
Closed Captioning of Video Programming)	CG Docket No. 05-231
)	
Notice of proposed Rulemaking)	
Released July 21, 2005)	

Comments of Media Captioning Services (“MCS”)

**2111 Palomar Airport Road, suite 220
Carlsbad, CA 92009
November 9, 2005**

I. Summary of Discussion Points

MCS will address several key issues raised by the FCC in our Comments. We will address the need for FCC regulations re non-technical Quality Standards and Technical quality control standards In addition, we will discuss at length

the following issues raised by the FCC for public comment:

- a. Market competitiveness of the closed captioning industry
 - b. Widespread problems in quality
 - c. Computation of errors/ guidelines vs. standards
 - d. Real time captioning and captioning for Pre-produced programming
 - e. Technical problems experienced by consumers
 - f. Complaint procedures
 - g. Fines/ opportunity to correct a defect
 - h. ENT in markets beyond the top 25
 - i. Availability of captioners, impact of "standards" on the supply of captioners.
 - j. Initiatives to train court reporters and closed captioners
- II. Background information- Media Captioning Services was formed in 1987, and was the first woman-owned formed in the U.S. to provide real-closed captioning. MCS has provided real-time captioning on major national, regional and local television stations, broadcast and cable. Our company was selected by CNN to begin real-time captioning on their cable network in 1990, and we provided captioning on CNN through 2002. MCS is a mid-size, full-service captioning company providing services currently to major news, and sports national and local video programmers. We have real-time captioned over 295,000 hours of news and sports programming since 1987.

III. Discussion

10. Non-Technical Quality Standards for Closed Captioning.

In the Report and Order released August 22, 1997, the FCC noted in par 17 “we seek to place maximum reliance on competitive market forces to develop efficient and cost-effective methods for captioning and for ensuring a high level of quality for captions.”

The FCC was correct in assuming a competitive, efficient market would ensure the provision of quality. However, the marketplace for closed captioning services can best be described at present as dysfunctional, predatory, and non-competitive in its normal course of operation. For example, in 1997 the median price range for real-time captioning was \$ 140-\$150 per hour. Although real-time captioned hours increased from nearly 25,000 per annum in 1997 to approximately 125,000 per annum currently (a 400% increase), the average per hour price for real-time captioning has dropped 28% per hour. This has not been the result of healthy, market-based competition, nor an increase in productivity. Nor does an astute observer require the acumen of Martin Feldstein to realize a dysfunctional market when a 400% increase in demand produces a 28% or more decrease in price. Some of the factors accounting for deterioration of the price- value relationship in the closed captioning market are:

- a. A reluctance of some video programmers, broadcast and cable to pay for closed captioning services. Some broadcasters have been receptive to “barter” proposals, where they would offer a captioning company advertising time in exchange for captioning services.**

- b. Improper use of federal funds by some captioning companies to subsidize predatory bidding.**

In fact, in 1998, a member of the FCC noted to MCS that the FCC Report and Order did not require video programmers to “pay” for closed captioning. The 1997 Report and Order set a threshold for a company’s captioning expenses of 2% of gross revenues as a benchmark, that would constitute an “undue burden” for a video programmer. We surmise, and most Deaf and hard of hearing consumers would no doubt agree, that in considering the level of expenditures which would occur before a video programmer incurred an “undue burden”, the FCC must have anticipated video programmers would incur tangible, line item costs for closed captioning, just as they do for hearing viewers. Although many video programmers have accepted closed captioning as a cost of doing business, many have not, and they have been receptive to proposals which minimized the cost of captioning to the video programmer. We can cite two instances of predatory activity in the captioning market as follows:

- c. In 2002 ,MCS was invited to bid on 12,000 hours per annum of video programming. The video programmer’s objective was to receive, as noted in documentation sent to MCS, a no-cost proposal. In fact, a competitor captioning company which proposed to caption 4 networks of this video programmer at no cost to the video programmer won the bid for this business. As a result, MCS lost significant operating revenue- over \$ 400,000 per annum- that would have financed a significant expansion of our closed captioning facilities, and job opportunities for captioners.**

- d. In 2004, MCS bid unsuccessfully on over 3000 hours of national, daytime news programming. MCS learned from key personnel in the decision process that the winning bid was “significantly below \$ 95 per hour.” In fact, we learned shortly thereafter that funding for captioning by the caption company which won the bid was forthcoming from the U.S. Department of Education and the video programmer. Bottom line, federal funds that were “unobligated funds” not originally obtained in a competitive grant competition were used by the captioning company to apparently subsidize the private sector bid to the video programmer. Such potential misuse of federal funds is representative of unfair competition, and predatory practices that have undermined the efficient operation of the market for closed captioning services.

The FCC should recognize that small to midsize captioning companies can only compete on price, quality and service for business. It would thereafter be incorrect to state, as TDI has stated, that market incentives for closed captioning have been insufficient to address non-technical issues, resulting in little improvement in captioning quality over the past five years. At the Caption Quality Initiative (CQI) conference held in Alexandria, VA in 2002, over 100 Deaf and hard of hearing consumers, advocates, and captioning companies met to discuss issues of concern to consumers. The two most important issues of concern were the perceived failure of the FCC to enforce the emergency captioning requirements consistently in top 25 DMA's, and the exceptional problems consumers were experiencing in resolving technical problems impacting on caption quality. The moderator of the conference

expressed surprise that quality of captioning was not ranked as high a concern as other factors, including the two noted above. Also, it is essential that the discussion of quality, and the need for enforcement distinguish between real-time captioning and pre-produced captioning which we will elaborate upon later in our comments. MCS believes that the optimum approach to promote high quality captioning is for the FCC to promote initiatives that restore the efficient market for captioning services. This includes, but is not limited to

1. Tax incentives for video programmers who use very small captioning concerns to meet captioning requirements,
2. More effective enforcement of anti-trust regulations, including enforcement action with the FTC and Department of Justice,
3. Use of the TRS fund to compensate very small captioning companies (less than 3 million in gross revenues) to provide captioning services,
4. Establishment of a fund from the analog spectrum sale in an amount not to exceed \$ 50 million per annum to compensate very small captioning companies who provide captioning services to video programmers in DMA markets 26-100. We believe the competitive entrepreneurial market for closed captioning services fostered by access to capital will restore a level playing field to encourage the development of a more efficient, value-based market for captioning services.

- e. In addition, we believe the FCC should require a functional equivalence guideline for real-time closed captioning, and a functional equivalence guideline for pre-produced programming.

(i) Real-time captioning which is functionally equivalent to the audio portion of broadcast must be accurate, and contextually correct. High quality is necessary for the real-time captioning to be functionally equivalent to the audio portion. Accuracy is the key element of high quality in the real-time captioning process. While some may argue that completeness is an integral component, we maintain that while verbatim is the goal, it is on occasion not possible to achieve because of conditions beyond the captioner's control, such as rapid speech, simultaneous conversations between people on air, and unfamiliar names or words which may be used during the broadcast. If wrong words are used, or key words are missed which impact on the viewers understanding, then contextually correctness has not been achieved, and the captioning would be, by definition, not functionally equivalent to the audio available to a hearing viewer.

(ii) We believe it would be appropriate for the FCC to require as a guideline, that a captioned broadcast must be 95% accurate to meet a functional equivalence requirement. In measuring accuracy, missing words and misspelled words would be counted as errors. The computation process must be straightforward, and transparent so that a broadcast engineer, or a highly-skilled individual with editing skills could compute the total number of missing/misspelled words, and determine whether the captioning transcription was contextually correct. In addition, the method of computation should be as noted

above, so that there is no need for a “caption expert” eliminating the spectre of conflicts of- interest in evaluating a company’s work product.

- (iv) MCS, in all its captioning agreements/contracts executed over the past 17 years, has addressed accuracy requirements with our clients. We see indications in the marketplace currently, that video programmers who are concerned about the potential for fines from the FCC are requiring caption companies to meet accuracy standards to achieve high quality captioning.

12 MCS does not agree with NCTA that a rule regulating caption quality would be counterproductive. However, we believe it would be more prudent, and consistent with the methodology used by the FCC in regulating other access services, such as TRS, and video relay services, that the Commission define the requirements for closed captioning in terms of functional equivalency for both real-time and pre-produced captioning. As noted above, we believe from our internal analysis of verbatim/translation accuracy on over 100 hours of news programming real-time programming on national news programming, that a 95% verbatim accuracy captioning level represents a minimum accuracy level to provide contextually correct information to viewers for real-time captioning. The real-time captioning process is substantially similar to the mental processes used by a simultaneous language interpreter. The real-time captioner uses stenography-based software to transcribe at rates of speech exceeding 240 words per minutes at times. The real-time captioner may, on occasion edit, or not write a particular article or adjective. In order to provide a statistically significant accuracy analysis, a

sampling of a number of captioned files would be necessary over several days of portions of a newscast, to account for degrees of difficulty over a range of broadcasts. There are significant administrative/ analytical challenges in computing accuracy on a statistically significant basis. In this respect we agree with NCTA. However, the consumer has a right, and expectation to receive a closed captioned transcription of the broadcast that is functionally equivalent to the broadcast audio. The elements which contribute to quality-accuracy, completeness, timeliness should not be "standardized." They are components of quality – not line 21 waveforms that can be measured with precision. Only accuracy – verbatim and or translation accuracy- are subject to measurement and quantitative analysis.

13. MCS believes the FCC should set a functional equivalency requirement for real-time captioning and pre-produced captioned programming as described above. The accuracy guidelines necessary to achieve functional equivalency should be 95 % verbatim accuracy for real time captioning and 99.5% for pre-produced captioned programming. Misspelled words, and missing words which affect contextual accuracy would be counted as errors. Caption companies and video programmers who agree upon error/accuracy rates in excess of FCC accuracy guidelines in their contractual relationships with video programmers would be in compliance by meeting minimum functional equivalency requirements noted above.

14. We believe the guidelines for pre-produced programs should be different for pre-produced versus live programming, because the

production processes are entirely different. In the real-time captioning process described previously, the captioner must instantly create the textual transcription of audio, with little or no opportunity to correct a mistake. The pre-produced captioning process entails the insertion of pre-prepared text to the precise video frame, adjusted for display of captioning to accommodate various reading rates. In addition, there is an opportunity to review the captioned video file to the text, inserting grammar where appropriate, and correcting misspelled words if any. There is ample opportunity to correct mistakes/defects. Where such mistakes occur, (as noted in the example cited by TDI on page 37 in their Petition for Rulemaking) such errors are the result of deficiencies in the production process, pressure to meet production deadlines, and/or ineffective quality control procedures. The accuracy threshold for functional equivalency should be substantially higher than real-time captioning since the pre-production (ie "offline-captioner") has the opportunity to exercise complete control over the captioning process, and the opportunity to correct any mistake/defect in the captioning process.

25. We believe it would not be an undue burden for video programmers, and distributors to monitor their video to ascertain if captions are present in their transmitted signals. Local broadcasters and cable programmers have the means through their engineering and or master control facilities to display a decoded caption feed of their on-air program to determine if captions are present.

26. We believe complaints regarding captioning should be directed to

the video programmer, distributor (local broadcaster or cable producer) simultaneously with filing a complaint to the FCC. Video programmers should make available a link on their websites for filing complaints. The TDI form for complaints could be filed with the video programmer as well as the FCC. We do not seek to increase the administrative burden to respond to complaints by consumers. However, consumers need a mechanism by which they can be specific about the nature of their complaint, and an accountability process by which the station/programmer becomes aware of the issue. The video programming distributor should respond and/or correct the defect within 14 days, if not sooner, and should note in monthly reporting to the FCC how problems, if any, were resolved.

29. MCS does not agree with NCTA that cable customer service rules guidelines are available and/ or adequate that specifically provide mechanisms for service interruptions or technical difficulties with captions. We have received many customer inquiries over the past 10 years from consumers who have in certain markets not received captions in their programming, although we (MCS) verified on our satellite downlinks captioned data was present in the line 21 portion of the vbi, and displayed as captioned information on decoder-equipped televisions. Consumers expressed frustration with their inability to have the problem with captions resolved, or to receive explanations as to why no captions were not present in their broadcast/cable video signal.

32. MCS agrees that the rules should be amended to allow consumers to complain about closed captioning directly via e mail, phone, or fax.

We also believe it would be helpful to the consumer if an e-mail address, or the ability for comments be implemented on websites of both broadcast services and cable services.

33. We believe an e-mail address, and a regular mail address for submitting caption complaints should be included on a customer's bill to enable a consumer to more efficiently channel concerns to their local video distributor.

35. We agree that the captioning complaint form as developed by TDI would be useful to consumers if posted on the FCC website.

48. MCS is in general agreement with TDI's request to extend the prohibition of counting ENT to markets beyond the top 25 DMA's. ENT does not provide for captioning of live news, sports segments of video broadcasts. ENT does not provide a quality captioned end product since significant portions of newscasts are not captioned. It should be apparent to the FCC that DMA markets 26-100 include many communities subject to severe weather, such as hurricanes, tornados, floods etc., where emergency information in live broadcasts (provided by real-time captioning) is of critical importance to the public's health, welfare and safety. From our experience, MCS has provided emergency services to local/national stations as part of a contractual relationship to provide real-time captioning of regularly scheduled newscasts. This is essential for two reasons: 1. real-time captioners familiar with local names/terminology are more readily available if they have been staffed to provide captioning of regularly scheduled newscasts, 2. real-time captioners, due to availability constraints cannot be ordered up "on

demand” in emergency situations. We also appreciate the cost considerations for stations in DMA markets 26-100, where advertising rates may not support the cost of closed captioning.

MCS has noted the significant decline in market rates for real-time closed captioning over the past seven years. Therefore, we do not agree with NCTA’s contention that high costs are a valid reason for not imposing captioning obligations at this time. We believe however, there must be a balancing of interests to enable Deaf and hard of hearing consumers in DMA’s 26-100 to have substantially greater access to real-time captioning of their local newscasts without increasing the financial burden on local news organizations in these markets. We urge the FCC to consider the following:

- 1. Compensate very small real-time captioning providers (\$ 3 million or less per annum in gross revenues) for providing real-time captioning in DMA markets 25-100. The FCC should provide a 4 year transition period to encourage very small captioning providers to increase staff, and encourage experienced court reporters to transition to the captioning industry.**

- 2. Caption providers that are very small businesses (\$ 3 million or less in gross revenues) would be compensated with funds from the TRS fund, with such funds replaced to the TRS fund after the public sale of analog spectrum licenses, expected to yield 18 to 25 billion dollars to the US Treasury. It is important to note that for the past 15 years, the Department of Education (with an average per annum budget of \$30 million) has been substantially responsible for the growth and availability of real-time and pre-produced captioning. A substantial portion of this funding will no longer be available to provide grants for real-time captioning after 2006. For the past 10 years, the cost to the U.S. taxpayer to provide federally funded closed captioning to Deaf and hard of hearing consumers (\$30 -34 million/yr over the period 1995-2005)**

has averaged 1 to 1.5 cents per annum, per consumer. It has been a most cost-effective utilization of federal funds. An allocation of \$ 50 million per annum for the next 3 years in federal funds from the public auction of analog spectrum in 2008 (expected to realize 18-23 billion dollars), to fund real-time closed captioning in DMA markets 26-100 would enable local news organizations in these markets to begin and or maintain real-time captioning using very small business caption providers, thereby developing the necessary closed captioning resources to continue to provide consumers with real-time captioning. In addition, additional resources would be developed to provide emergency real time captioning on a more widespread, consistent basis in DMA markets 26-100. Also, this would level the playing field for local cable and broadcast programmers in these markets, who have had to incur the cost of building digital television plants at substantial cost without the viewership in top 25 DMA markets, and funding these digital conversion costs with operating funds.

Local news providers in DMA's 26-100 will resist incurring additional operating costs for real-time captioning without this creative financing, or will put further pricing pressure on caption vendors to make the provision of real-time economically infeasible.

49,50 Availability of Captioners- The FCC notes that "in arriving at an eight-year phasing period for captioning 100% of new programming the Commission weighed the needs of deaf and hard of hearing individuals with the ability of the programming industry to meet the demand for increased captioning." The transition schedule was reasonable as were the assumptions by the FCC, but the real facts about the state of capacity of the closed captioning industry follow:

a. The universe of captioning company providers consists of between 130-140 very small to small companies. However, 6 companies provide 75% of the real-time captioning in the U.S. Four of the above-noted companies are both horizontally and vertically integrated to enable them to use their market dominance in different accessibility services (ie. pre-production real-time captioning,) to substantially undercut less diversified, very small captioning company providers. During the period 1998 through 2003, the four above-noted companies enjoyed exceptionally good fortune as recipients of grant federal funds-receiving numerically, on average 65% of awards, and 80% of all dollars awarded in competitions over this period. During this time frame the U.S. Department of Education provided 40-45% of all funding for closed captioning in the U.S. and therefore access to federal funds enabled these companies to establish a substantial competitive advantage. In certain situations, access to federal funds has enabled certain companies as noted above bid at below-market share levels to gain substantial market share. Over 95% of all national news/sports programming is captioned by these four companies as well. This has had a substantial impact on the growth of the industry. Opportunities for very small caption companies to obtain business, and hire court reporters to enter the caption profession have been sparse.

While there may be more very small captioning providers in 2005 than in 1997 evidencing an increase in number, their market share in

providing captioning of local/national news and sports programming is insignificant. They have not had the ability or opportunity to compete for business given the monopolistic, predatory nature of the market for captioning services.

b. We estimate the number of active, full and part time captioners providing real-time closed captioning to be 625-650 people, compared with approximately 150 captioners in 1997. Approximately 450 captioners work with the 4 above-noted firms. Approximately 75% of these captioners work from their home locations as independent contractors.

c. On average, real-time captioners are captioning 20-24 hours per week. Given the demands of real-time captioning, including preparation/review time, real-time captioners are nearing their maximum production level. As we implement the next benchmark for closed captioning January 1, 2006, (7300 hours per annum) the availability of trained competent captioners will be severely tested.

d. Real-time captioners are not being trained quickly enough. Court reporting schools have not been able to improve pass rates on state certification exams. In California, in the November, 2004 and May certification exams, 22 out of 199 and 44 out of 199 passed the State CSR (Certified Shorthand Reporter exam)- pass rates ranging from 11-22%.

e. Real-time captioners have experienced a decline in their hourly compensation - from \$ 95-120 per hour on average in 1997 to less than \$ 60 per hour in 2005. In 2005, the California Superior Court was offering \$75,000 per annum to individuals with certifications

and skill levels who would be earning \$ 55,00-\$60,000 as a captioner.

Bottom line, the attrition rate of captioners and demand for additional capacity that can in the short run be offset by attracting trained court reporters to the captioning profession are being negatively impacted by competition for highly trained real-time court reporters for court or free-lance deposition work.

f. The FCC seeks comment on the impact of a quality “standard” on the supply of captioners. There are some captioning companies who believe quality “standards” will attract trainees or established court reporters to the captioning profession. Although the most highly motivated captioners as professionals strive to produce the best product they can, they are economic beings who have choices in the market place for their unique skills. Compensation commensurate to their skills and level of professional development is the motivating factor- people want to be paid for their expertise. MCS has experienced in recent contracts, indemnification provisions that defacto require MCS to incur the cost of FCC fines for quality related fines incurred by the video programmer. This represents another level of cost for any captioning company, and potentially reduced compensation for captioners. Labor costs currently account for 80-90% of captioning companies’ direct cost, so margins would erode further. Ultimately the number of vendors may contract, and the industry will consolidate to three or four companies who are willing to underwrite the additional indemnification costs. In short order, video programmers from existing to new networks will be faced with a significant rise in per hour costs of captioning, which may very well be the

intended objective of certain companies actively pursuing federally mandated closed captioning “standards.”

51. The legislation sponsored by the NCRA (National Court Reporters Association) proposes to make grants to NCRA approved schools in the amount of \$ 60 million over 4 to 5 years. If 20 court reporting schools receive such funding, with an average enrollment of 400 students each, based on graduation rates and pass rates on state certification exams, 800 students (10%) over 5 years might receive state certifications. Based on our experience, 20% of certified court reporters have the level of skill to become real-time captioners. If 160 individuals choose to become captioners (this assumes all would choose captioning over potentially higher- paying jobs in the court system or deposition work), the average cost to the taxpayer would be \$375,000 or the equivalent of 8 years at Harvard College. MCS has suggested to NCRA that a portion of such funding be used to pay the salaries of students who work with very small captioning companies (who do not have training budgets). New captioner graduates would have the opportunity to work with experienced captioners in very small captioning companies, perfecting their craft similar to the guild system where apprentices learned their craft from masters. We believe this approach would enable a significantly larger number of newer graduates to become successful real-time captioners and expand the captioning capacity of the industry. To date, our recommendations have not been implemented in this legislation, which provides no guarantees that individuals trained with these federal funds will choose to become captioners as opposed to real-time writers using their court reporting skills in other areas of the profession.

We have suggested earlier in our comments that the FCC fund very small captioning companies from the TRS fund and or from proceeds from the public auction of analog spectrum to provide very small business (caption) companies with the opportunity to grow their businesses by providing additional captioning in DMA markets 26-100. In addition, we believe a 15% tax credit funded from the sale of analog spectrum should be paid to video programmers- cable and broadcast- for every dollar they spend for captioning services provided by a very small captioning company (less than 3 million in gross revenues). This would continue to encourage video programmers who are currently using very small captioning companies to provide them with captioning services, and offset the predatory (perhaps illegal) marketing approaches utilized by some larger captioning companies.

APPENDIX C. Description and Estimate of the Number of Small Entities Impacted.

The FCC describes in several pages of its Notice of Proposed Rulemaking the impact on Small Entities affected by this proposed Rulemaking. We are puzzled by the conspicuous absence of a discussion of the impact of these regulations on closed captioning companies. There is no mention of closed captioning companies in the discussion of small business concerns, annual receipts and size standards in this discussion, although the import of this regulation will fall directly upon the closed captioning industry.

For the record the SBA considers companies providing real-time captioning services with annual gross receipts of \$ 6 million or less small entities, and companies with \$ 25 million or less from pre-production

business small entities. Using the above-noted Standard Industry Classifications, virtually all companies in the closed captioning industry would be classified as small businesses. The definitions are deficient, since an element of the definition of ‘small business’ is that the entity not be dominant in its field of operation. In the closed captioning industry, we have strong reason to believe that three dominant companies in the industry would still be classified as small entities based on the annual gross receipts limits noted above for captioning companies., based on current SBA size standards

In January, 2005 MCS responded to the SBA request for comments re Proposed Rulemaking on Size Standards. We urge your coordination with the SBA on new size standards. The SBA requested comments on the importance of sub categories in federal procurements for very small businesses. We believe a very small captioning business should be defined as one with no more than 15 employees and \$ 3 million or less in average annual receipts.

Closing comments:

In summary, we believe that consumers can benefit most when the marketplace for goods and services operates efficiently to enable consumers to obtain the highest quality at the lowest price. That is the essence of value. Consumers have the right to expect, after an eight year transition period, that they will receive high quality captioning, and compliance with the regulations. We believe it is appropriate for the FCC to establish guidelines denoting how functional equivalency is to be provided to consumers for real-time and pre-produced/off-line captioning. Converting the essential elements of captioning- accuracy, completeness, timeliness, into “standards” will not necessarily produce the intended benefit- more likely than not such non-technical quality “standards” will be used to initiate a wave of complaints,

placing a huge administrative compliance burden on the FCC, video programmers, and caption companies. We strongly support TDI's efforts to require more efficient technical problem procedures, and believe this can be accomplished efficiently using internet resources of video programmers, the complaint procedure cited by TDI, and the good faith commitment of the cable and broadcast industry to resolve issues before they escalate to the level punitive measures from the FCC are required.